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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/542,307	07/15/2005	Peter Rohrig	CU-4299 RJS	7296
26530 LADAS & PAF	7590 09/15/200 RRY LLP	EXAMINER		
	ICHIGAN AVENUE	HICKS, ROBERT J		
	SUITE 1600 CHICAGO, IL 60604		ART UNIT	PAPER NUMBER
			3781	
			MAIL DATE	DELIVERY MODE
			09/15/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
	10/542,307	ROHRIG, PETER
Office Action Summary	Examiner	Art Unit
	ROBERT J. HICKS	3781
The MAILING DATE of this communication a Period for Reply	ppears on the cover sheet with th	e correspondence address
A SHORTENED STATUTORY PERIOD FOR REF WHICHEVER IS LONGER, FROM THE MAILING - Extensions of time may be available under the provisions of 37 CFR after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period. - Failure to reply within the set or extended period for reply will, by stat Any reply received by the Office later than three months after the ma earned patent term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMMUNICATI 1.136(a). In no event, however, may a reply be od will apply and will expire SIX (6) MONTHS fr tute, cause the application to become ABANDO	ON. e timely filed om the mailing date of this communication. NED (35 U.S.C. § 133).
Status		
Responsive to communication(s) filed on 26 This action is FINAL . 2b) ☐ TH Since this application is in condition for allow closed in accordance with the practice unde	nis action is non-final. vance except for formal matters, p	
Disposition of Claims		
4) ☐ Claim(s) 1-24 is/are pending in the application 4a) Of the above claim(s) is/are withd 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-24 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and Application Papers 9) ☐ The specification is objected to by the Exami	rawn from consideration. I/or election requirement.	
10) ☐ The drawing(s) filed on 15 July 2005 is/are: Applicant may not request that any objection to the Replacement drawing sheet(s) including the correction. The oath or declaration is objected to by the	ne drawing(s) be held in abeyance. Section is required if the drawing(s) is	See 37 CFR 1.85(a). objected to. See 37 CFR 1.121(d).
Priority under 35 U.S.C. § 119		
12) ☐ Acknowledgment is made of a claim for foreign a) ☐ All b) ☐ Some * c) ☐ None of: 1. ☐ Certified copies of the priority docume 2. ☐ Certified copies of the priority docume 3. ☐ Copies of the certified copies of the priority docume application from the International Bure * See the attached detailed Office action for a limit	ents have been received. ents have been received in Applic riority documents have been rece eau (PCT Rule 17.2(a)).	ation No ived in this National Stage
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date	4) Interview Summa Paper No(s)/Mail 5) Notice of Informa 6) Other:	

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DETAILED ACTION

Response to Amendment

1. Because of the applicant's amendment, the original objection to the abstract, in the office action filed March 31, 2009, is hereby withdrawn.

Claim Rejections - 35 USC § 102

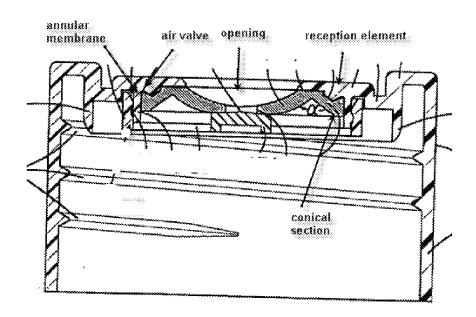
2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

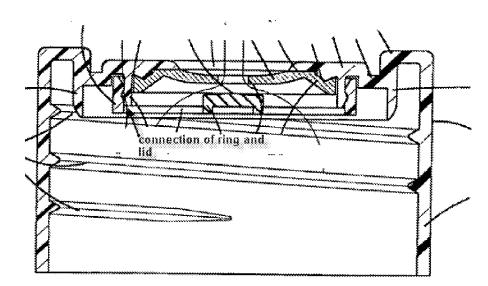
- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 3. Claims 1-8 are rejected under 35 U.S.C. 102(b) as being anticipated by Suffa et al. (WIPO 95/26306) [Suffa].
- 4. Regarding Claim 1, the publication to Suffa a closure for a container discloses an air valve (15) for a lid (1) of a liquid container (Page 1 Lines 23-25, Page 2 Lines 52-53), which includes an annular membrane (10), wherein said lid contains at least one air passage opening said air valve (Fig. 5, through direction 25) comprising a reception element (13, 14) including a peripheral groove that is open towards the inner side of the lid is fastened to the inner side of the lid and comprises at least one air entry opening communicating with the air passage opening of the lid and leading into the groove (Fig. 5, through direction 25), wherein a ring (2) is insertable or inserted in the groove and the air entry opening is sealed at equal pressures on either side of the air entry opening and at an overpressure at the inner side of the lid (Fig. 4, Page 2 Lines 59-64), due to the bias of at least one groove wall designed as an annular membrane,

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and the air entry opening is released at an underpressure at the inner side of the lid (Fig. 5, Page 2 Line 65 to Page 3 Line 3). When the container is being used, the liquid flow goes through the center and the entry openings are sealed (**Suffa**, Fig. 4, Page 2 Lines 59-64). When the container is not being used or is finished being used, the air goes through the sides of the membrane due to the underpressure (**Suffa**, Fig. 5, and Page 2 Line 65 to Page 3 Line 3).



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- 5. Regarding Claim 2, Suffa discloses the end region of the ring (2) facing the air entry opening of the reception element in the inserted position of the ring is designed to be substantially conical in cross section (Fig. 1).
- 6. Regarding Claim 3, Suffa discloses the end region of the ring facing the air entry opening of the reception element has at least one recess (Fig. 4).
- 7. Regarding Claim 4, Suffa discloses the ring is fixed in the reception element by the aid of a snap connection (through 7, Pg. 2 Lines 21-24).
- 8. Regarding Claim 5, Suffa discloses the ring comprises on its outer side a circumferential bead for snapping into the groove of the reception element (Fig. 4, Page 2 Lines 21-24).
- 9. Regarding Claim 6, Suffa discloses the inner groove wall is an annular membrane (Fig. 4).
- 10. Regarding Claim 7, Suffa discloses the annular membrane comprises at least one thin spot to fix the bias of the annular membrane (Fig. 4).

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11. Regarding Claim 8, Suffa discloses the ring (2) is connected with a fastening ring (7) in the direction of the lid opening is connected with the ring via an inwardly extending connection flange (18).

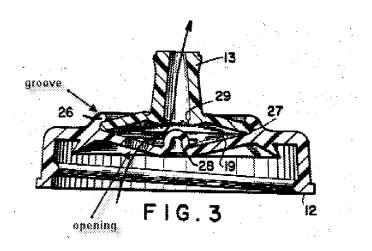
Claim Rejections - 35 USC § 103

- 12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 13. The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:
 - 1. Determining the scope and contents of the prior art.
 - 2. Ascertaining the differences between the prior art and the claims at issue.
 - 3. Resolving the level of ordinary skill in the pertinent art.
 - 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
- 14. Claims 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suffa as applied to claim 8 above in view of Croyle (3,321,114).
- 15. Regarding Claim 9, Suffa discloses all the limitations substantially as claimed, as applied to claim 8 above. Suffa does not expressly disclose the features of claim 9; however, the patent to Croyle a pop-up diaphragm closure discloses one ventilation opening (**Croyle**, 21) in the connection flange (**Croyle**, 19, Fig. 4). The hole is located on the flange to dispense internal contents. It would have been obvious at the time of the invention to one of ordinary skill, using the teaching, suggestion, and motivation

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within the prior art, to modify the connection flange in the Suffa valve assembly to have valve openings, as suggested by Croyle, for the contents to be easily dispensable (**Croyle**, Col. 2 Line 70 to Col. 3 Line 2).

16. Regarding Claim 10, Suffa in view of Croyle discloses all the limitations substantially as claimed, as applied to claim 9 above; further, Croyle teaches the ventilation opening of the connection flange (**Croyle**, 21) is located adjacent to the inner groove wall (**Croyle**, Fig. 3).



- 17. Claims 11-17 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suffa as applied to claim 1 above in view of Esposito, Jr. (3,232,499) [hereinafter Esposito].
- 18. Regarding Claim 11, Suffa discloses all the limitations substantially as claimed, as applied to claim 1 above. Although Suffa discloses the air valve of claim 1, Suffa does not expressly disclose the other features of claim 11. However, the patent to Esposito a closure and container combination with valve means discloses a drinking mouthpiece (Esposito, 16) made of elastic material (Esposito, Col. 2 Lines 13-21)

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located on a lid (**Esposito**, 13) for a liquid container (**Esposito**, Col. 2 Lines 3-6, and Col. 3 Lines 2-6). The bottle can contain food product or other household products including drinking liquids. It would have been obvious at the time of the invention to one of ordinary skill, with all the claimed features known in the prior art and with one of ordinary skill with the knowledge to combine these elements by known methods without effecting the utility of the prior art, to have the Suffa air valve to be placed in a drinking mouthpiece made of elastic material, as suggested by Esposito, which allows for product to flow through the dispensing aperture with a flexible membrane (**Esposito**, Col. 1 Lines 19-24).

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- 19. Regarding Claim 12, Suffa in view of Esposito discloses all the limitations substantially as claimed, as applied to claim 11 above; further Esposito teaches the mouthpiece (**Esposito**, 16) is produced by injection molding (**Esposito**, Col. 1 Lines 14-21, and Col. 2 Lines 13-21). Injection molding is a modern molding method.
- 20. Regarding Claim 13, Suffa in view of Esposito discloses all the limitations substantially as claimed, as applied to claim 12 above; further, in the combination, Suffa discloses a valve assembly (Suffa, Fig. 1) for a substantially elastic mouthpiece of a liquid container (Suffa, Pg. 1 Lines 23-25), which includes a flexible membrane (Suffa, 2) having at least one valve opening (Suffa, Fig. 1) and a substantially rigid membrane supporting element (Suffa, 17) having at least one valve opening (Suffa, through 18), wherein, with the valve assembly being in a closed position, the membrane rests on the membrane supporting element and the valve opening of the membrane is sealingly covered by the membrane supporting element and the valve opening of the membrane

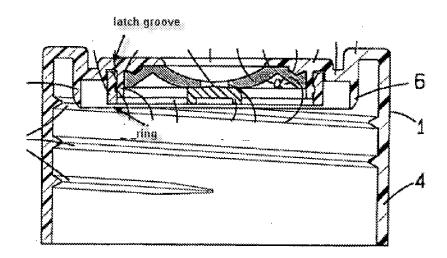
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supporting element is sealingly covered by the membrane (**Suffa**, Fig. 1), the membrane being inwardly curved in said closed position, wherein during the external application of pressure to the drinking mouthpiece and/or the application of an under pressure at the membrane side facing away from the membrane supporting element (**Suffa**, Pg. 2 Lines 59-63), the membrane is in a resnapped, open position in which the valve openings of the membrane and membrane supporting element, respectively, are released (**Suffa**, Fig. 4), and Esposito discloses a flexible membrane (**Esposito**, 15a-b) in which when in an open position, the membrane is in a resnapped, outwardly open configuration (**Esposito**, Fig. 5, Col. 2 Lines 27-33).

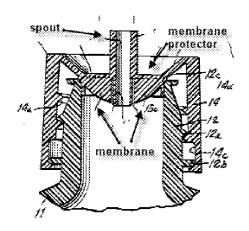
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- 21. Regarding Claim 14, Suffa in view of Esposito discloses all the limitations substantially as claimed, as applied to claim 13 above; further Suffa discloses the membrane is conical in its closed and open positions (**Suffa**, Figs. 1 and 4).
- 22. Regarding Claim 15, Suffa in view of Esposito discloses all the limitations substantially as claimed, as applied to claim 13 above; further Suffa discloses the membrane support element (**Suffa**, 17) comprises a valve seat surface (**Suffa**, 16) corresponding with the inwardly curved shape of the membrane in the closed position (**Suffa**, Fig. 1).
- 23. Regarding Claim 16, Suffa in view of Esposito discloses all the limitations substantially as claimed, as applied to claim 13 above; further Suffa discloses a latch groove intended to receive the membrane supporting element configured as a latch body (**Suffa**, Fig. 1).

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- 24. Regarding Claim 17, Suffa in view of Esposito discloses all the limitations substantially as claimed, as applied to claim 13 above; further, Suffa teaches the membrane supporting element is connected with a fastening ring (**Suffa**, 7) via a web (**Suffa**, 18, Fig. 1).
- 25. Regarding Claim 22, Suffa in view of Esposito discloses all the limitations substantially as claimed, as applied to claim 13 above; further, Esposito discloses the mouthpiece formed as a drinking spout (**Esposito**, 16) extends beyond the membrane, whereby an elevated drinking spout edge is formed as a membrane protection and spacer element (**Esposito**, Fig. 4).



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26. Claims 18 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suffa in view of Esposito as applied to claim 13 above, and further in view of Meins (4,415,097).

- 27. Regarding Claim 18, Suffa in view of Esposito discloses all the limitations substantially as claimed, as applied to claim 13 above. The Suffa and Esposito combination does not expressly disclose that the mouthpiece is oval in top view; however, the patent to Meins a drinking container with spout discloses a mouthpiece for a lid that is oval in top view (Meins, 65, Fig. 8, Col. 3 Lines 51-57). The nipple or mouthpiece is oval in shape. It would have been obvious at the time of the invention to one of ordinary skill, using the teaching, suggestion, and motivation within the prior art, to modify the mouthpiece in the Suffa and Esposito combination valve assembly to be oval in shape from the top view, as suggested by Meins, in order to flatten the mouthpiece for better storage (Meins, Col. 3 Lines 51-57).
- 28. Regarding Claim 19, Suffa in view of Esposito in view of Meins discloses all the limitations substantially as claimed, as applied to claim 18 above; further, Suffa teaches the web (**Suffa**, 18) used to fasten the membrane support element is a plate with the plain defined by the web in the direction of the longer axis of the drinking mouthpiece top view (**Suffa**, Fig. 2). A circle is a special type of ellipsis or oval.
- 29. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Suffa in view of Esposito as applied to claim 13 above, and further in view of Croyle.

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Suffa in view of Esposito discloses all the limitations substantially as claimed, as applied to claim 13 above. The Suffa and Esposito combination does not expressly disclose the features of claim 20; however, the patent to Croyle discloses a membrane (Croyle, 18) with several valve openings arranged in a circular line (Croyle, 21, Fig. 4). The openings are aligned in circular fashion. It would have been obvious at the time of the invention to one of ordinary skill, using the teaching, suggestion, and motivation within the prior art, to modify the flexible membrane on the Suffa and Esposito combination valve assembly to have valve openings arranged in a circular line, as suggested by Croyle, for the contents to be easily dispensable (Croyle, Col. 2 Line 70 to Col. 3 Line 2).

30. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Suffa in view of Esposito as applied to claim 13 above, and further in view of Laauwe (4,747,518).

Suffa in view of Esposito discloses all the limitations substantially as claimed, as applied to claim 13 above. The Suffa and Esposito combination does not expressly disclose the features of claim 21; however, the patent to Laauwe – a squeeze bottle with a venting valve – discloses a membrane supporting element (Laauwe, 19) with a central valve opening (Laauwe, 20, Fig. 5). The supporting element has a recess to have the stopper (Laauwe, 24). It would have been obvious at the time of the invention to one of ordinary skill, using the teaching, suggestion, and motivation within the prior art, to modify the membrane supporting element in the Suffa and Esposito combination valve assembly to have a central valve opening, as suggested by Laauwe, to allow

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movement of the cap back and forth between the open and closed positions (Laauwe, Col. 3 Lines 49-54).

31. Claims 23 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suffa in view of Esposito as applied to claims 13 and 12 above, respectively, and further in view of Baudin et al. (5,924,605) [hereinafter Baudin].

Suffa in view of Esposito discloses all the limitations substantially as claimed, as applied to claims 13 and 12 above, respectively. Although Esposito teaches the mouthpiece is made of a thermoplastic elastomer (Esposito, 16, Col. 2 Lines 13-21), the Suffa and Esposito combination does not expressly disclose that the membrane supporting element or the lid are made of polypropylene [PP]. However, the patent to Baudin – a dispensing head for a container – discloses a lid (Baudin, 2) and a membrane supporting element (Baudin, 28) that are both made of PP (Baudin, Col. 2 Lines 40-42). The lid includes the integral support element, and both are made of PP. It would have been obvious at the time of the invention to one of ordinary skill, using the teaching, suggestion, and motivation within the prior art, to manufacture the lid and membrane support element in the Suffa and Esposito combination valve assembly to be made of PP, as suggested by Baudin, for "the two materials [for the membrane and the lid] and the moulding conditions are chosen in such a way that a solid bond is formed by thermal fusion and/or mechanically, between the cap and the elastic element." (Baudin, Col. 5 Lines 45-48).

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Response to Arguments

32. Applicant's arguments with respect to claim 1 have been considered but are moot in view of the new ground(s) of rejection. In response to applicant's argument that the Suffa reference fails to show certain features of applicant's invention {Remarks, Page 10 Lines 4-10}, see Paragraph 4 of this office action to see how Suffa meets the claim limitations regarding claim 1.

33. In response to applicant's argument that the Suffa reference fails to show certain features of applicant's invention {Remarks, Page 10 Lines 14-16}, it is noted that the features upon which applicant relies (i.e.,"...the groove wall 26 ... is designed as an annular membrane resilient enough to be lifted from its seat at a certain pressure in the lid") are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ROBERT J. HICKS whose telephone number is (571)270-1893. The examiner can normally be reached on Monday-Friday, 8:30 AM - 5:00 PM, EST. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anthony Stashick can be reached on (571) 272-4561. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Robert J Hicks/ Examiner, Art Unit 3781 /Anthony Stashick/ Supervisory Patent Examiner, Art Unit 3781